

REMARKS

This Amendment is in response to the Office action mailed April 28, 2009. A petition for one-month extension of time, and payment (by credit card authorization) for the requisite extension fee and two additional claims in excess of 20, are submitted herewith. In the event any additional fees are necessary, kindly charge the cost thereof to our Deposit Account No. 13-2855.

Status of the Claims

Claims 21-54 are pending in the application, with claims 21-24 and 41-52 having been withdrawn as a result of election/restriction requirements. Claims 25 and 36 are amended to further recite "wherein the invalid indication includes an internal control signal which at least one of disables the printing apparatus or causes an error message to be displayed on a display of the printing apparatus." This is supported by the specification as originally filed, for example on page 3, last paragraph, page 8, second full paragraph, and Fig. 5, and does not add any new matter.

New claims 53 and 54 are added. Claims 53 and 54 recite "wherein the storage medium comprises a column of unique identifier fields, one or more corresponding status fields, and a blacklist including the list of any previously used identifiers associated with empty consumables." This language is supported by the specification as originally filed, for example on page 10, second and third paragraphs, and does not add any new matter.

Response to Rejections Under 35 U.S.C. § 102

Claims 25, 27, 29, 31, 32 and 36 were rejected under 35 U.S.C. § 102 as allegedly anticipated by Hilton et al., EP 0 903 237 ("EP '237"). EP '237 discloses a printer having user replaceable ink cartridges. The printer detects whether the ink cartridge has been refilled with

non-qualified ink, and if so, will adjust the printing mode to a non-normal mode to minimize the effect on the print quality. This is distinguishable from the amended claims of the present application, as the printer of EP '237, contrary to the Applicants' amended claims, will still permit printing with a refilled consumable. In addition, the method by which the printer of EP '237 determines that a consumable has been refilled is also different than the claims of the present application. According to EP '237, the consumable contains an identifier that is used to validate the consumable. Once the cartridge is empty, the printer *overwrites the identifier in the cartridge* with a new identifier, such that the printer can detect that the cartridge has previously been emptied. Therefore, if the cartridge is refilled and placed back into the printer, the printer can know that it has been refilled and adjust the print process accordingly.

EP '237 does not disclose a storage medium for holding a list of any previously used identifiers associated with the consumables and a processor arranged to compare the identifier read by the reader with the list of any previously used identifiers, as presently claimed in independent Claim 25. Claim 25, as amended, is, therefore, respectfully submitted to be patentable over the disclosure of EP '237. Further, EP '237 does not disclose the generation of an invalid indication whereby the microprocessor will not implement printing operations or will cause an error message to be displayed. At page 11, line 1, of the present application, the invalid indication is stated as being "CARTRIDGE EMPTY – INSERT NEW CARTRIDGE", thereby indicating printing is not permitted using a consumable associated with an identifier on the list of previously used identifiers.

Nothing in the disclosure of EP '237 informs the skilled person that a list of previously used identifiers should be held on a storage medium. In EP '237, cartridge identifiers are overwritten and the system allows for refilled cartridges. That is exactly what the claims of the

present application seek to avoid. The prevention of printing with previously used cartridges provides the advantage that cartridges are not re-filled with non-tested material so preventing damage to the printer. Additionally, unauthorized re-fillers are unable to re-use and re-sell consumables for use in the printing apparatus once they have been used and emptied. It is therefore respectfully submitted that claims 25, the claims depending therefrom, and claim 36, are not anticipated by EP '237.

Response to Rejections Under 35 U.S.C. § 103

Claims 26, 28, 30, 33-35 and 37-39 were rejected under 35 U.S.C. § 103 as allegedly obvious from Hilton et al., EP '237, in view of Klinefelter et al., WO 00/43932 ("WO '932"). WO '932 discloses a printer where the printer supply (in this case the print ribbon) contains an RF tag that contains information that can be used to control the printing process. WO '932 further discloses that information such as the supplier and lot number may be present on the consumable. An identifier on the consumable is disclosed, but there is no mention of comparing the identifier with a list of previously used consumables to validate its use and generating an invalid indication if there is a match.

The provision of the list of previously used identifiers allows quick identification of a loaded consumable with consumables already used; this provides the advantage that unauthorized re-fillers are not able to re-sell previously used or fake consumables for use in the printing apparatus of the claims of the present application.

WO '932 discloses that date information in an RFID tag may be processed to prevent printing through an interlock (208) if date information *carried in the RFID tag* (142) indicates that the ribbon has degraded due to age, or can display this information to a display so an operator can make a decision whether to use the material. This also focuses on identifier

information on a cartridge, as opposed to a storage medium of the printing apparatus that holds a list of previously used identifiers associated with empty consumables, as recited in the Applicants' claims 25 and 36.

The proposed combination or modification of EP '937 in view of WO '932 would not result in the Applicants' claims, as amended.

New dependent claims 53 and 54 recite "wherein the storage medium comprises a column of unique identifier fields, one or more corresponding status fields, and a blacklist including the list of any previously used identifiers associated with empty consumables." This language is also neither anticipated nor rendered obvious from EP '937, alone or in combination with WO '932, or from any of the other art of record.

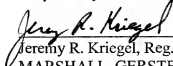
CONCLUSION

Neither EP '937 nor WO '932, alone or in combination, teach or suggest a printing apparatus that holds a list of previously used identifiers associated with empty consumables, and a processor arranged to compare the identifier read by the reader with the list of any previously used identifiers and to generate an invalid indication if there is a match, wherein the invalid indication includes an internal control signal which at least one of disables the printing apparatus or causes an error message to be displayed on a display of the printing apparatus. It is therefore respectfully submitted that claims 25-39 and 53-54 are allowable and the Examiner's reconsideration and favorable action are respectfully solicited.

If the Examiner has any questions that might easily be resolved by telephone, the Examiner is invited to contact the Applicants' undersigned representative at (312) 474-6300.

Date: August 28, 2009

Respectfully submitted,

A handwritten signature in black ink, reading "Jeremy R. Kriegel", is written over a horizontal line.

Jeremy R. Kriegel, Reg. No. 39,257
MARSHALL, GERSTEIN & BORUN LLP
233 South Wacker Drive, 6300 Sears Tower
Chicago, Illinois 60606
Tel. (312) 474-6300
Fax (312) 474-0448

Attorney for Applicants